set or roles being discussed. In another example, privilege templates **404** contains a set of one or more privilege templates. A combination of privilege templates **404** and roles **406** define a set of role-based privileges **414** within role-based privilege management system **400**.

Editor **402** is a typical general editor, suitable for editing the stored form of the rule and template definitions. For example, a text-based editor may be used for text editing of markup language-based documents or files. Editor **402** is used to create and maintain the definitions for privilege templates **404** and roles **406**.

Privilege templates **404** defines the privileges to be conveyed to a user having a defined role referencing the privilege templates. One or more privilege templates may be referred to by roles **406**. Roles **406** may also inherit privileges from other specifically referenced roles, as defined in the hierarchical definition of the role. Roles **406** provides the conveyance vehicle for privileges, as defined in associated privilege templates **404**.

Transform utility **408** provides a capability of taking the platform-independent definitions of roles **406** and privilege templates **404** onto target environments **410**. The independent format of definitions is made environment-specific by transform utility **408**. Transform utility **408** may also select the appropriate definitions based on indicators in privilege templates **404** and roles **406**. Target environments **410** has been shown as operating system platforms of OS**1**, OS**2** and OS**3**, but the environments may be applications, or subsystems as well, and is not meant to be limited to an operating system environment. Transform utility **408** is responsive to transformation request **412** to initiate a transform of the definitions, in the applicable instances of privilege templates **404** and roles **406**, toward the desired target environment, as defined by target environments **410**.

Set of role-based privileges **414** defines one or more privileges conveyed to a specific role. For example, a role of administrator may have specifically conveyed privileges of create, update and delete access to a command file or use of the commands.

With reference to FIG. **5**, a text representation of a general format of a privilege template, in accordance with illustrative embodiments is shown. The example uses a conventional tag-based language format to define the various elements of privilege template **500**. Illustrative embodiments depict the two basic data model concepts of privilege templates and roles.

Privilege templates are defined in a generalized form using parameterized privilege information. Roles are then defined as references to a set of previously defined privilege templates with values specified for the parameterized elements of the privilege templates.

Attributes define the privileges granted to roles that reference the specified privilege template. There are two forms of attributes. One form of attribute defines the environment to which the template applies. Another form of attribute defines the privileges that are conveyed. Privilege templates are defined hierarchically with child templates inheriting the properties of parent templates.

Privilege template **500** is a hierarchical structure. The hierarchy allows minimal duplication of information. For example, in the definition of privilege template **500**, fragment **502** represents a basic structure needed to compose privilege template **500**. Fragment **502** shows a set of statements for specifying a name of a template and basic attributes. Statement **504** provides a name for the privilege template being defined. The name may then be used to refer to the privilege template by other privilege templates or roles.

Statement **506** and statement **508** provide attribute definitions. These statements may be repeated as needed to fill out the privilege being defined. For example, statement **506** defines the environment to which the following attribute definitions apply. The keyword applies-to indicates an environment specification is being made and the following value is a name of the environment. Environment is typically an operating system type specification, but may also be a platform comprising an application or database subsystem.

Statement **508** defines a privilege attribute and an associated attribute value. The statement indicates the privileges being conveyed in this instance. Attributes are categories of identified elements in the target environment or categories that may be mapped to such elements. For example, an attribute can be a command, while the value can be the command itself.

With reference to FIG. **6**, a text representation of an example of a privilege template with a role definition, and an inherited role example, in accordance with illustrative embodiments is shown. Template **600** depicts a privilege template, a role definition, and a hierarchical role specification. For example, fragment **602** is an example of a privilege template, fragment **604** is an example of a role definition, and fragment **624** is an example of a hierarchical role definition.

The privilege templates typically contain references to platform specific privileges for each of the platform based roles referencing the specified privilege templates. The roles and privileges are not defined in a platform independent form rather the definitions provide a transform capability to a desired platform. A specific set of platform privileges as specified in the privileges template may be selected by the transform utility and transformed. The privilege template provides a capability to define privileges specific to one, all or more than one platform, as required.

User assignment to specific roles is not managed using the privilege templates or the role template definitions. Assignment of a user to a role may be managed in a file separate from the file containing the privilege templates and role definitions or the same file. The privilege templates and role definition examples provided in the context of privilege manager **302** of FIG. **3** provide the definitions to identify roles and the associated privileges for an environment in which a previously defined user of a specified role typically exists.

The privilege template of fragment **602** begins with an identification of PrivilegeTemplates **606** followed by the names, WebSphere, and AppServer, indicating an inheritance from prior templates. Statement **608** is the first attribute type statement in the privilege template. Statement **608** indicates the environment to which the privileges associated with SystemCommands will be conveyed. In this example, two environments are defined.

Statement **610** is another attribute definition statement and is related to the previous statement specifying the environments. In statement **610**, the environments of statement **608** have been narrowed in scope to only a single, specific instance. This example shows how a specification can be made more specific, or granular, when needed. Statement **612** is a corresponding attribute statement providing the definitions for the other environment named in statement **608**. Statements **610** and **612**, therefore, complete the further specification of the respective environments.

Statement **614** provides a parameterized definition for an attribute of a command type. The statement defines the commands allowed, by conveyance of the privilege, to start and stop a server in the specific named environment. For example, the value "${WAS_INSTALL} indicates that the particular command is dependent on the parameter "WAS_INSTALL"